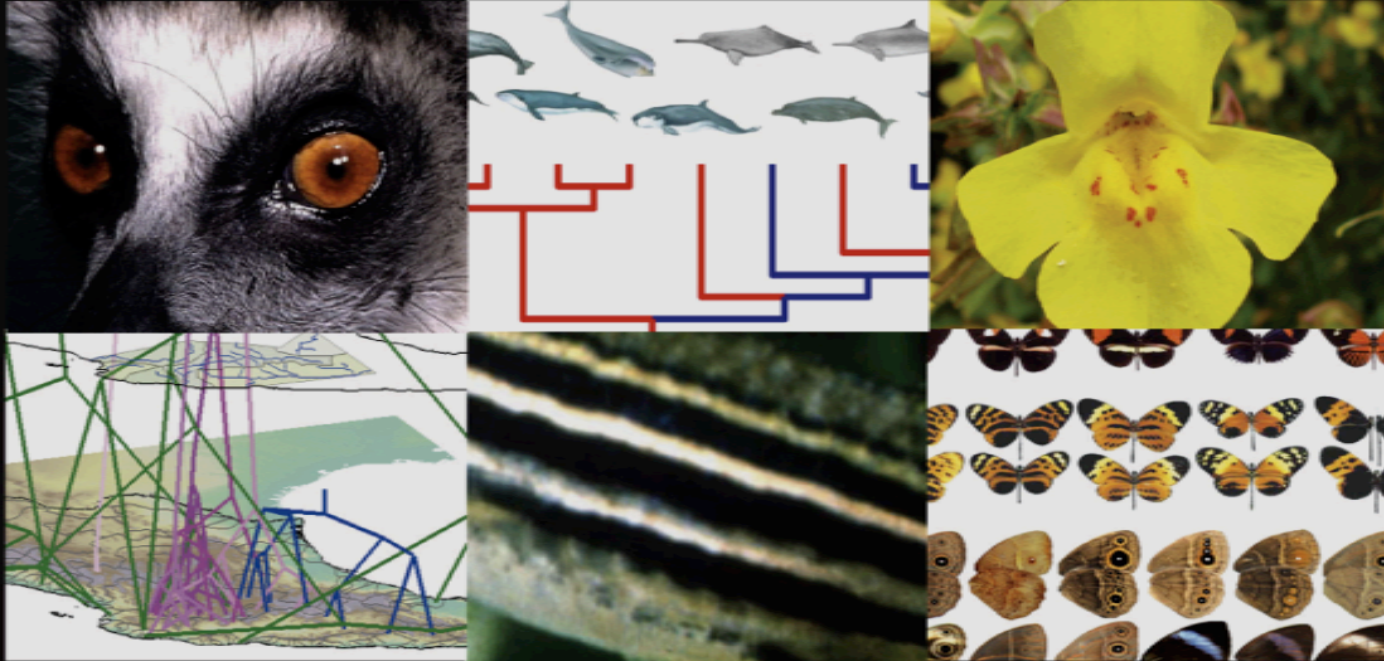


NESCent

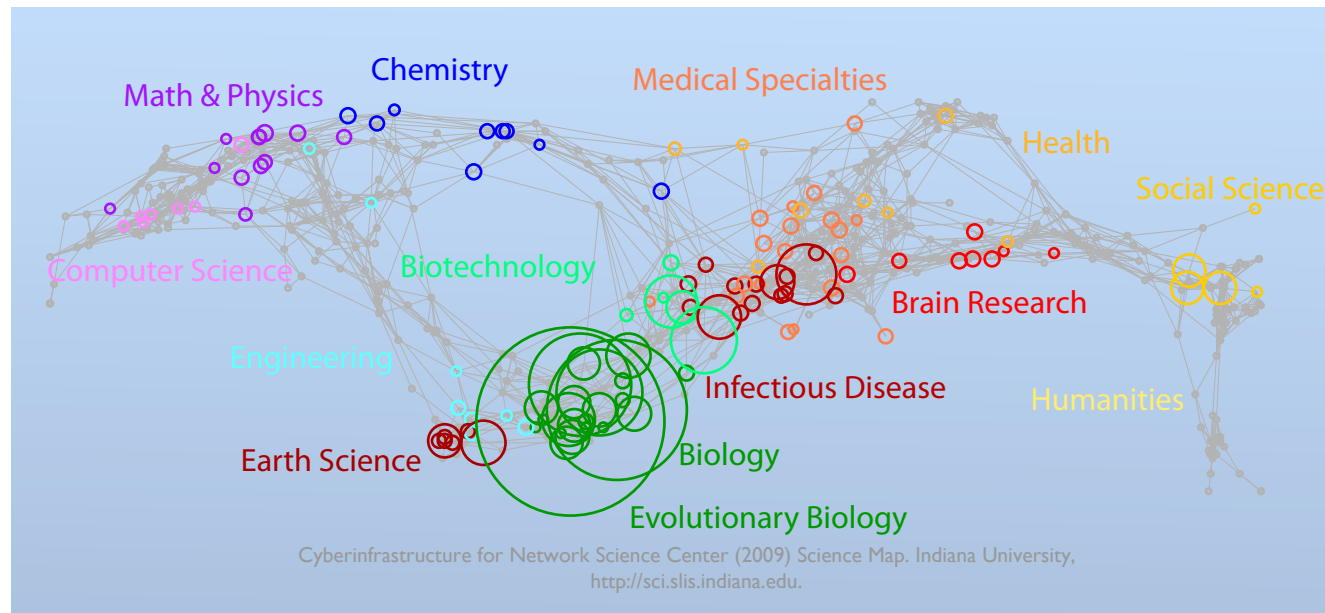


National Evolutionary Synthesis Center

Our mission

To promote the synthesis of information, concepts and knowledge to address significant, emerging, and novel questions in evolutionary science and its applications.

We accomplish this by supporting research and education across disciplinary, institutional, geographic, and demographic boundaries.



National Evolutionary Synthesis Center



Sponsored science

- Short-term visitors (2 wks – 3 mos)
- Graduate fellows (1 semester)
- Postdoctoral fellows (2-3 yrs)
- Sabbatical scholars (6 months – 1 yr)
- Working groups (2 yrs, ~12 individuals)
- Catalysis meetings (1 time, ~30 individuals)

Education and Outreach

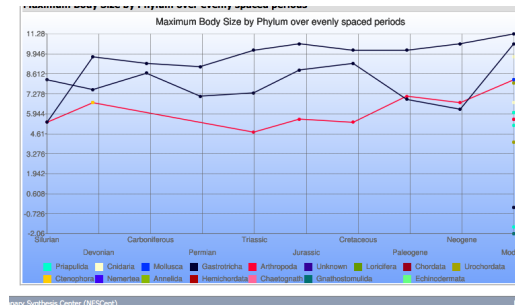
- NESCent Academy for researchers and teachers
- Darwin Day
- Journalists-in-residence
- Promoting participation by under-represented groups

Informatics...



Custom tools for sponsored scientists

Maximal bodysizes throughout evolutionary history
(bodysize.nescent.org)



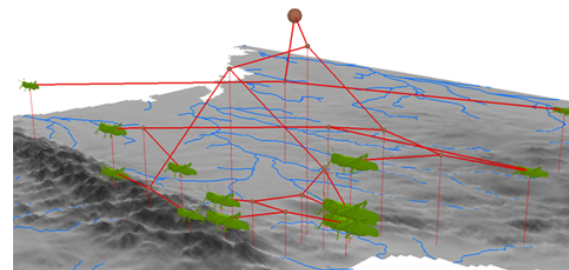
J. Payne,
J. Stempień,
M. Kowalewski

Synthesis of primate life history data (plhd.nescent.org)



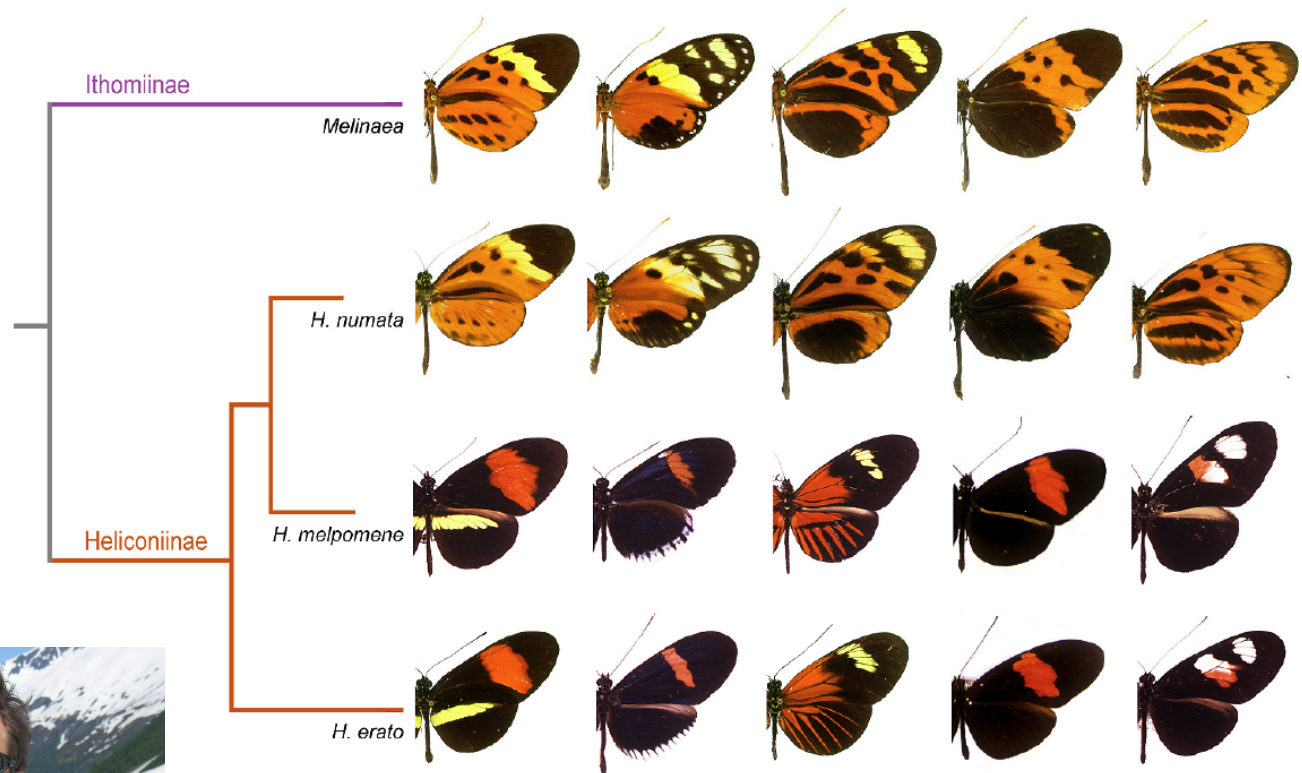
S.Alberts

Visualizing geophylogenetic data (GeoPhyloBuilder)



D. Kidd

Genome databases for evolutionary models

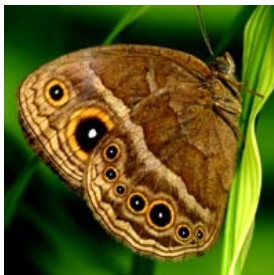


Heliconius spp.

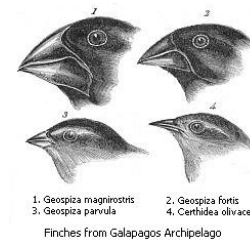


Owen McMillan

Evolutionary model organisms



- Compelling biology
- Sequence & map data
- Stocks
 - Natural diversity
 - Phenotypic mutants
 - Mapping populations
 - Clones, microarrays, etc.
- Protocols
- Community
 - Web database




Images: BioMedia Assoc. (Saccoglossus), UBC Bot. Gard. (Aquilegia), C. Farmer (Mimulus), N. Patel (Paryphale), P. Burton (Nematostella), C. Darwin (Geospiza), NY State Dept. of Environmental Conservation (Gasterosteus), A. Monteiro (Bicyclus), J. Selier & J. Peterson (Populus), J. Good - NPS (Peromyscus)

Cyberinfrastructure initiatives

- Need within the evolutionary biology community.
- Impact on facilitating synthetic science
- Impact across disciplines
- Feasibility and cost-effectiveness.
- Strength of the match to the capabilities and of the center.
- Success requires the involvement of a national center.



GMOD user support



navigation

- GMOD Home
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- FAQs
- HOWTOs
- For the Biologist
- Glossary

community

- GMOD News
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- About this site

developers

- CVS
- SourceForge Site

search

Go Search

toolbox

- What links here

Welcome to GMOD

GMOD is the **Generic Model Organism Database** project, a collection of open source software tools for creating and managing genome-scale biological databases. You can use it to create a small laboratory database of genome annotations, or a large web-accessible community database. GMOD tools are in use at [many large and small community databases](#).

How do I Get Started?

For a project overview see [GMOD for the Biologist](#). For an introduction to specific GMOD components see the list of the most popular tools at the right, or visit [GMOD Components](#) for a comprehensive list of GMOD tools. If GMOD looks promising for your needs consider sending someone to the 2008 [GMOD Summer School](#).

How do I Get Support?














GMOD support is available from several different sources. [Finding Support](#) introduces each support option (this web site, [GMOD Mailing Lists](#), and the [GMOD Help Desk](#)) and offers guidance on which one is the most appropriate for your question.

How do I Get Involved?

As an open source project GMOD relies on the donation of time and software by groups and individuals. Contribution of new tools, adoption of existing ones, and improving the documentation are all welcome. [Existing](#) and potential users are encouraged to provide feedback via [mailing lists](#) or the [help desk](#). The [GMOD Project Page](#) lists projects in need of ideas and developers.

You can also attend project meetings. See [November 2007 GMOD Meeting](#) and [Hackathon 2007 info](#) for summaries of the two most recent meetings.

Contributing Organizations



GMOD News

Ten Recent Web Site Changes
Pathway Tools at Pathway Analysis
GMOD at Arthropod Genomics
Apollo 1.7.0 Released
GBrowse Tutorial at PAG XVI
Modware Feedback Wanted
November 2007 GMOD Meeting
GMODTools 1.1 Released
GMOD Help Desk is Back

New & Revised Pages

• RubberBandSelection • GBrowse karyotype • GMOD Summer School • GBrowse Ubuntu HOWTO • GBrowse syn • GBrowse Configuration HOWTO • Sybil • June 2007 Progress Report • GMOD News • Calendar

Popular GMOD Tools

Genome Browsing and Editing
Apollo: Genome annotation editor
GBrowse: Genome annotation viewer

Comparative Maps
CMap: Comparative map viewer
Sybil: Comparative genome viewer

Database Tools
Chado: Biological database schema
BioMart: Data mining system
GMODTools: Chado to Fasta, GFF, ...

Ontologies for evolutionary data



entity: scale

source: Teleost Anatomy Ontology

- ① pharyngeal tooth plate
- ① pharyngobranchial tooth plate
- ① postcleithrum
- ① posttemporal
- ① posttemporal-supracleithrum
- ① premaxilla
- ① preopercle
- ① preopercle horizontal limb
- ① preopercle vertical limb
- ① pterotic-posttemporal-supracleithrum
- ① rostral plate
- ① **scale**
- ① circuli
- ① ctenoid scale
- ① focus
- ① lateral line scale
- ① pouch scale
- ① radius
- ① sensory canal tubular ossicle

Properties

Synonyms: scales (exact)

Definition: Dermal bone that is thin, flexible, and platelike, and that develops in overlapping skinfolds that cover the body and often the head of fish and the bases of the fins.

ID: TAO:0000277

Relationships (about)

is part of: dermal superficial region

is a type of: dermal bone

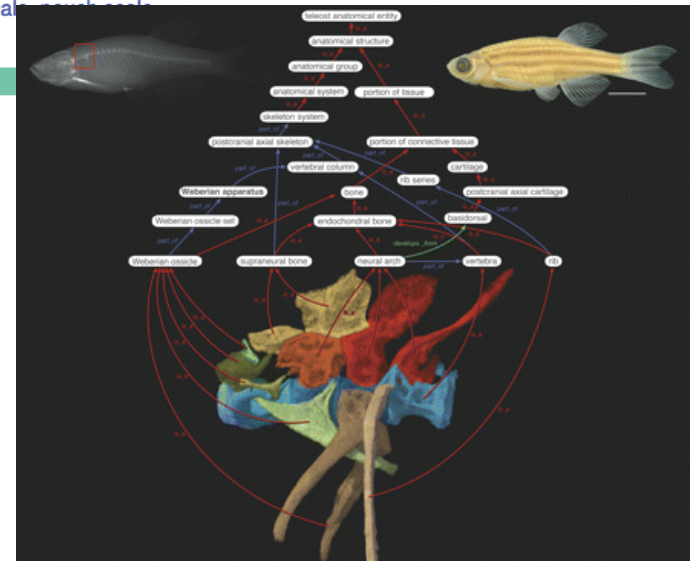
has subtype: ctenoid scale, lateral line scale, rough scale
may have part: circuli, focus, radius

Data in the Knowledgebase

Comparative phenotype annotations

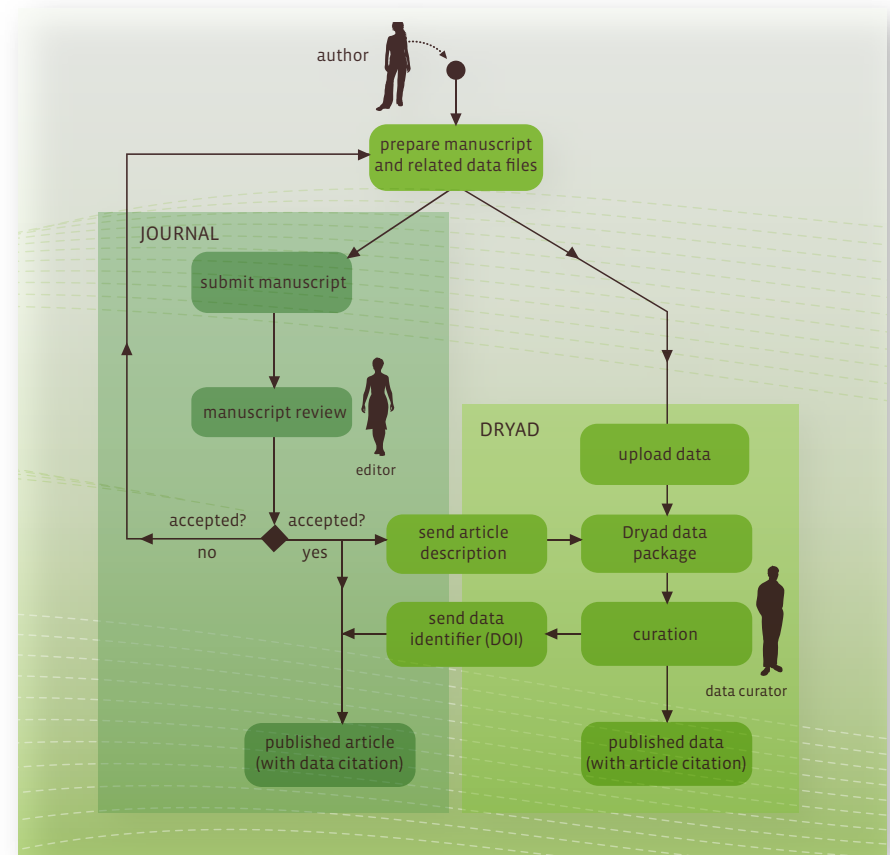
Gene phenotype annotations

Comparative publications





- Data archived as part of publication
- Easy submission process
- Peer review of data
- Persistent link from paper to data
- Support for data citations
- Data in public domain
- Option to embargo
- Deep data indexing and searching
- Updatable datafiles
- File format migration
- Governed and sustained by journals



<http://datadryad.org>

Promoting open-source evoinformatics

Courses



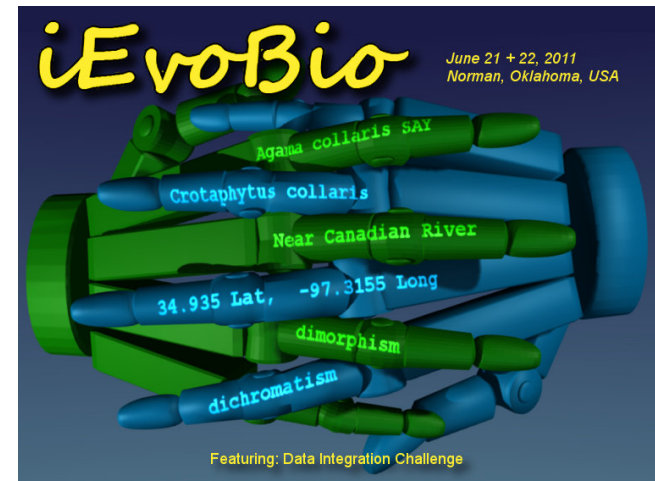
COMMUNITY &
SATELLITE MEETINGS
GMOD COURSE

DURHAM, NORTH CAROLINA
NESCENT, MARCH 5-12

Internships



Conferences

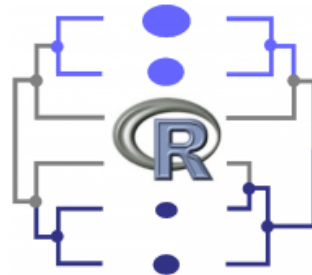


Hackathons

- Promote interoperability, add new functionality to existing community resources, nurture collaborations, build a cohesive developer community



Comparative phylogenetic
methods in R



2007

GMOD tools
for evolutionary biology



2010

Idea for a hackathon? Submit a whitepaper

when I whip out my tool gun, a mass of text yells at me.

All of my weapons work and shoot, but when i shoot them a ERROR text pops out the side and bounces aroun on the floor.They used to all not do that untill i got on about a week ago and they did.The weapons that came with gmod don't shoot big ERRORS from the side but now only some of the downloaded ones don't.

i click the fire button the blue beam comes out but it has no effect on the prop or anything else, and without your physics gun you simply cant play the game because u cant bulid anything you cant move anything its so frustrating, so please answer this message and give me some feedback and help so i cant solve this issue. so please help me i am so desperate to get it working again and you are my last resort no one else has responded

You have reached the help desk for the Generic Model Organism Database (<http://gmod.org>). You want the other GMod, Garry's Mod (<http://www.garrysmod.com/>). Garry's Mod has two support channels:

1. Email - support@garrysmod.com
2. Help and Support forum: <http://forums.facepunchstudios.com/forumdisplay.php?f=16>

Regards,
Dave C.

Oh, I'm so sorry! Haha. I bet you guys get alot of e-mails from people referring to garry's mod. Good luck databasing generic organism models! (or whatever it is you guys do)

So Gmod and Garry's mod are completely different?

P.S - I finally took a look at the Garry's MOD webpages. It actually looks kinda cool..